

Metal Oxide Varistors (MOV)

Features

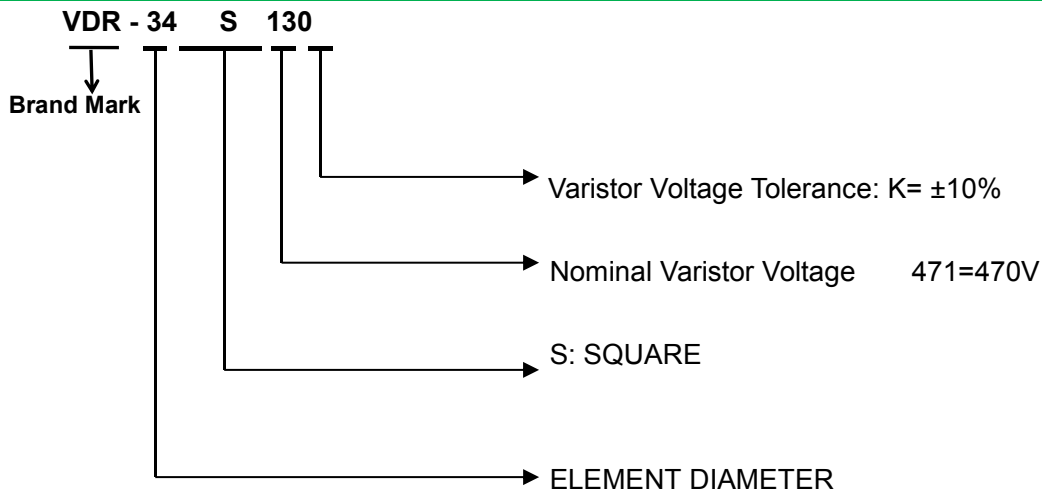
- Wide operating voltage (V1mA) range from 200V to 1800V
- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no follow-on current
- Meets MSL level 1, per J-STD-020
- Operating Temperature: -40°C ~ +85°C
- Storage Temperature: -40°C ~ +125°C
- UL 1449 4th for SPD Type 5 application
- Safety certification:



Applications

- Transistor, diode, IC, thyristor or triac semiconductor protection
- Surge protection in consumer electronics
- Surge protection in industrial electronics
- Surge protection in electronic home appliances, gas and petroleum appliances
- Relay and electromagnetic valve surge absorption

Description of Part Number



Delivery Time

Standard MOV	Delivery Time
VDR34S130~VDR34S1100	32days



Electrical Characteristics

Part Number Marking	Maximum Allowable Voltage		Varistor Voltage V _{1mA} (V)	Maximum Clamping Voltage		Max Surge Current I _{max} 8/20μs	Surge Operating Duty Test IEC 61643-11 (8/20μs)			Maximum Energy W _{10/1000} (J)	Safety Certification UL / CUL
	V _{AC}	V _{DC}		I _P (A)	V _C (V)		I _{max}	I _n	I _n		
VDR34S130	130V	170V	200(180~220)	300	340	40KA	40KA	20KA	330	√	
VDR34S140	140V	180V	220(198~242)	300	360	40KA	40KA	20KA	360	√	
VDR34S150	150V	200V	240(216~264)	300	395	40KA	40KA	20KA	390	√	
VDR34S175	175V	225V	270(243~297)	300	455	40KA	40KA	20KA	420	√	
VDR34S190	190V	250V	300(270~330)	300	500	40KA	40KA	20KA	460	-	
VDR34S210	210V	275V	330(297~363)	300	550	40KA	40KA	20KA	500	√	
VDR34S230	230V	300V	360(324~396)	300	595	40KA	40KA	20KA	510	√	
VDR34S250	250V	320V	390(351~429)	300	650	40KA	40KA	20KA	530	√	
VDR34S275	275V	350V	430(387~473)	300	710	40KA	40KA	20KA	600	√	
VDR34S300	300V	385V	470(423~517)	300	775	40KA	40KA	20KA	650	√	
VDR34S320	320V	415V	510(459~561)	300	845	40KA	40KA	20KA	700	√	
VDR34S350	350V	460V	560(504~616)	300	925	40KA	40KA	20KA	730	√	
VDR34S385	385V	505V	620(558~682)	300	1025	40KA	40KA	20KA	780	√	
VDR34S420	420V	560V	680(612~748)	300	1120	40KA	40KA	20KA	810	√	
VDR34S460	460V	615V	750(675~825)	300	1240	40KA	40KA	20KA	850	√	
VDR34S480	485V	640V	780(702~858)	300	1290	40KA	40KA	20KA	930	√	
VDR34S510	510V	670V	820(738~902)	300	1355	40KA	40KA	20KA	970	√	
VDR34S550	550V	745V	910(819~1001)	300	1500	40KA	40KA	20KA	1050	√	
VDR34S625	625V	825V	1000(900~1100)	300	1650	40KA	40KA	20KA	1120	√	
VDR34S680	680V	895V	1100(990~1210)	300	1815	40KA	40KA	20KA	1250	√	
VDR34S750	750V	980V	1200(1080~1320)	300	1980	40KA	40KA	20KA	1250	√	
VDR34S880	880V	1140V	1400(1260~1540)	300	2310	40KA	40KA	20KA	1400	-	
VDR34S1000	1000V	1280V	1600(1440~1760)	300	2640	40KA	40KA	20KA	1500	-	
VDR34S1100	1100V	1465V	1800(1620~1980)	300	2970	40KA	40KA	20KA	1600	-	

Dimension(mm)

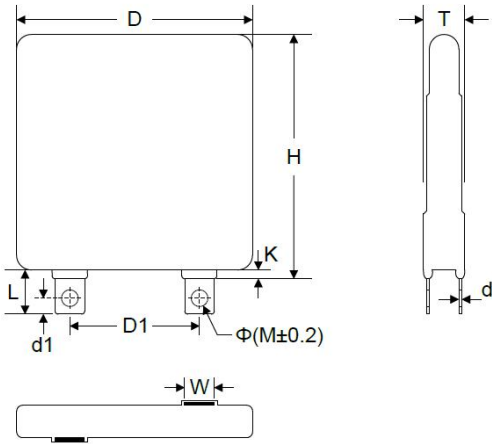


TABLE1		TABLE2	
Symbol	Dimensions	Part number	T(±1.0mm)
H(Max)	40.0mm	VDR34S130	3.7mm
L(Min)	14.5mm	VDR34S140	3.8mm
D(Max)	38.0mm	VDR34S150	3.9mm
D1(±1.0)	25.4mm	VDR34S175	4.1mm
T	TABLE2	VDR34S190	4.3mm
d(±0.25)	0.5mm	VDR34S210	4.4mm
d1(±0.3)	3.7mm	VDR34S230	4.6mm
K(Max)	3.2mm	VDR34S250	4.8mm
W(±0.5)	7.0mm	VDR34S275	4.9mm
ΦM(±0.2)	3.2mm	VDR34S300	5.3mm
		VDR34S320	5.5mm
		VDR34S350	5.8mm
		VDR34S385	6.2mm
		VDR34S420	6.5mm
		VDR34S460	6.9mm
		VDR34S480	7.1mm
		VDR34S510	7.3mm
		VDR34S550	7.9mm
		VDR34S625	8.7mm
		VDR34S680	9.3mm
		VDR34S750	9.8mm
		VDR34S880	10.5mm
		VDR34S1000	11.5mm
		VDR34S1100	12.5mm

Packing Information



Part Number	Quantity	Packaging Option
VDR34S130 ~ VDR-34S350	60PCS	Foam box
VDR-4S385 ~ VDR-34S1100	40PCS	Foam box

Foam Box Bulk Pack

VDR34S130 ~ VDR34S350

VDR34S385 ~ VDR34S1100



Notice for use

To avoid damage to other equipment due to fire or deterioration caused by varistor, please refer to and observe the following principles:

1) When a high current or high voltage flows into the varistor, the varistor itself may be damaged, heated, smoke, catch fire and burst.

To avoid this, fuses or circuit breakers can be installed at both ends of the varistor or power supply;

The fuses of the following specifications are for reference only:

	Diameter 05D	07D	10D	14D	20D
Rated current of fuse	1-2A	2-3A	3-5A	3-10A	5-15A

2) Do not allow the current and energy flowing into the varistor to exceed its rated value.

3) The marked VDR product brand names and marks are all patent applications of the company.

Customers who use or sell VDR products that are not specifically designated for such applications are at their own risk.

4) All VDR products, product specifications and data are subject to change without notice, please improve. For any data sheet Or any other data sheet. Any errors included. Inaccurate or incomplete shall not be liable.

5) Regarding the suitability of products for specific applications. It is the customer's responsibility to confirm that products with the characteristics described in the product specifications application. The data provided in the parameter data sheets and / or specifications may vary for different applications and performance may vary over time Variety. All operating parameters, including typical parameters, must be provided by the customer 's technical experts. Product specifications will not expand or Modify the VDR procurement terms and conditions in other ways, including but not limited to the guarantees described therein.

6) Do not place flammable substances near the varistor.

7) The varistor can only emit a small amount of heat energy, so it is not suitable for use in equipment that often generates sudden heat.

In addition, the higher the working environment of the varistor, the smaller the proportion of heat dissipated. Varistors can only dissipate a small amount of heat energy, so they are not suitable for use in equipment that often generates sudden heat.

If a large amount of heat acts on the varistor in an instant, it is possible that the heat energy cannot be dissipated within the pulse time And the varistor is damaged.

8) When welding, please be careful not to melt the welding points of the varistor and the resin coating.

Material category policy

All products of VDR hereby certify that RoHS-compliant products are in accordance with the definitions and Restrictions on June 8, 2011 regarding restrictions on the use of certain hazardous substances (Reach) in electrical and electronic equipment. We confirm All VDR products comply with the IEC 61249-2-21 JEDEC JS709A standard.